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DISCUSSION
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CITY PLANNING DIVISION

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DISCUSSION OF THE ALLEGHENY CONFERENCE—PLANNING IN ACTION PROCEEDINGS-SEPARATE NO. 131

LOUIS P. BLUM,⁹ M. ASCE.—The history of flood prevention in Pittsburgh by the construction of a series of flood control dams is reviewed by Mr. Martin. It is pertinent to trace the history of this idea from its original conception.

After the disastrous flood of 1907, the Pittsburgh Flood Commission was formed to study local floods and suggest the proper solution to the problem. The chairman of this commission was H. J. Heinz, a leading merchant. An engineering committee was formed under the chairmanship of E. K. Morse, M. ASCE, consisting of George S. Davison and Morris Knowles (Honorary Members, ASCE), and Paul Didier, Emil Swenson, W. G. Wilkins (Members, ASCE), and Julian Kennedy, a member of the American Society of Mechanical Engineers. George M. Lehman, M. ASCE, executive engineer on the commission, made extensive surveys of flood damage and established high water marks within the Allegheny, Monongehela, Ohio, and Youghiogheny river basins. Its voluminous report, issued in 1912, and based on extensive surveys, contained a wealth of engineering data on floods (Report of Flood Commission of Pittsburgh, Pa., to Pittsburgh Chamber of Commerce, 1911). Although the commission recommended walls for local protection, their main recommendation was the construction of a system of flood-regulating reservoirs in the headwaters of the Allegheny, Monongahela, and Youghiogheny rivers. This engineering report is believed to have been the pioneer of American proposals for the harnessing of river floods. Preliminary designs of proposed reservoirs, based on the actual topography, were published in the report.

The solution was regarded as visionary and impractical. Engineering comment was extremely critical. Nevertheless, the flood commission remained in existence for several years, defending and publicizing its conclusions and predicting future floods of greater magnitude. The army engineers, the Pittsburgh civil authorities, and the public placed little faith in the possibility of a recurrence of flood disaster. However, on March 17, 1936, the largest flood in Pittsburgh history was recorded. Renewed investigation by the army engineers resulted in the recommendation of a system of flood-regulating reservoirs in the same general localities and of the same general design as those of the original flood commission report. Considering the limited time and resources of the commission, its conclusions coincided closely with the later reports, upon which construction was based, and have proved highly successful. This is typical engineering achievement—an idea is evolved, further investigation follows, and then actual construction is the result.

Now that Pittsburgh is nearly free from flood menace, the joint achievement and meritorious cooperation of the Pittsburgh Flood Commission, the army engineers, and the Allegheny Conference can be recorded.

⁹ Retired, Pittsburgh, Pa.

PARK H. MARTIN,¹⁰ M. ASCE.—The discussion by Louis P. Blum, M. ASCE, is historically correct. It pays tribute to members of the ASCE who were prominent in a bygone generation. Probably the outstanding impression that one would get from the discussion is to the effect that most public works projects, particularly those of great magnitude such as the flood control program for the Pittsburgh district, are the result of the thinking and efforts of a number of people over a long period of time.

To those in the city planning field, it is apparent that this same impression is true in connection with most important city improvement projects. The work of the Allegheny Conference may also be said to fall in this category. Many national magazines and papers have dramatized the developments brought about by the Pittsburgh development program during the past seven years. Whether this has been overemphasized depends upon one's viewpoint. Those who are connected with the program are aware that its success cannot be attributed to any one person or to any one group. Most of the projects have had years of thought and planning by numerous people, but it has remained for the Allegheny Conference to bring the planning to fruition. It is believed that the example set in Pittsburgh has had a beneficial effect on other American cities and has brought to city planning the public understanding that it has not had before.

It seems appropriate to close with a comment on Mr. Blum, who discussed a phase of this paper. He recently passed away, leaving behind an honorable record of integrity and professional skill.

¹⁰ Executive Director, Allegheny Conference on Community Development, Pittsburgh, Pa.

**DISCUSSION OF UNIFIED MASS-TRANSPORTATION SYSTEM
SYSTEM FOR NEW YORK
PROCEEDINGS-SEPARATE NO. 171**

JOHN F. KRAUS.⁴—A clear, concise, and factual presentation of the mass-

⁴ Chairman, Inter-Municipal Group for Better Rail Service, North Plainfield, N. J.

transportation problem and its solution has been given by the author. The writer's comments have been made in the hope that various issues may be clarified for those who are not thoroughly acquainted with this problem in the New York metropolitan region.

In the Introduction, Mr. Reid stated that

"* * * no public official or public body has taken effective action to bring into being a modern, unified mass-transportation system for people residing within that great metropolitan area."

However, in the spring of 1952 (subsequent to the preparation of Mr. Reid's paper), the states of New Jersey and New York enacted legislation, creating commissions to develop jointly plans and specifications for the improvement and coordination of the rapid transit facilities of the New York metropolitan region, and to recommend all necessary measures. Commission appointments were made by the Hon. Alfred E. Driscoll, Governor of New Jersey on July 31, 1952, and by the Hon. Thomas E. Dewey, Governor of New York on November 13, 1952, but the commissions have not met jointly and no work has been done to date (1953). It was intended that the commissions ultimately would become the agency to build and operate the proposed project.

Because rubber-tired transportation has reached its practical limits, the need is not for more vehicular facilities, but for relief. This relief, as Mr. Reid states, is mass transportation by rail. The existing (1953) trend from rail to rubber is not a solution, because the railroads still form the life-blood arteries between communities. The trend from rail to rubber has been caused by the lack of comparable investments in railroad facilities as in vehicular facilities, the latter partly by subsidies. This trend has not only unbalanced the transportation system, but has presented the following problems, the cost of which is borne by both the user and the nonuser of transportation facilities:

1. The traffic problem is growing daily. The New York Regional Plan Association stated⁵ that if the use of railroads for commuting is permitted

⁵ "New York's Commuters," Report of July 1951, Regional Plan Assn., Inc., New York, N. Y.

to decline in favor of motor-vehicle commuting, traffic congestion in the region's central business areas and costs of relieving such congestion will increase out of all proportion to the number of persons transported.

2. Increased parking facilities are required. It is interesting to note that one trainload of commuters is estimated to require four acres of parking space if carried by private automobiles.

3. The adverse effect on business of traffic congestion and lack of parking facilities has resulted (in some cases) in decentralization.

4. Highway construction and maintenance costs are mounting. They are estimated to be more than \$5,000,000,000 a year for the period from 1953 to 1963.

5. Losses of tax ratables, as a result of the building of vehicular facilities, are mounting.

6. The cost of automobile insurance is rising.

7. (a) The number of accidents is rapidly mounting. Up to 1951, the total number of persons killed in automobile accidents was over one million, and in 1952, the number passed the total number of all Americans killed in all wars since the Revolution.

(b) The Institute of Life Insurance reports payments of \$69,000,000 under some 39,000 policies for automobile accident death claims during 1952. This figure is four times the amount of life insurance death claims arising from the first 2 years of the Korean War.

The need for a unified transportation system has long been recognized. Municipalities have contended before regulatory bodies and governmental agencies that one of the keys to the long-range solution of the mass-transportation problem lies in the consolidation of competing railroads with wasteful and expensive duplicating facilities. This contention is borne out by a report (December 1, 1949) of the Secretary of Commerce to the President of the United States, which stated that the problem of railroad consolidation is particularly urgent because the continued existence of an adequate railroad system is necessary for peacetime commerce and for wartime emergency. This report emphasizes the fact that, following considerable study of unnecessary duplication of facilities and other waste and unnecessary expenses in railroad operations, savings of approximately \$800,000,000 annually could have been made in 1932 and 1933. The report also states that 10 years later, the Board of Investigation and Research reported that increased efficiency could save the railroads approximately \$1,400,000,000 on an annual basis. This report recommended that action toward the obtaining of the most efficient railroad plant should be initiated immediately. The report also stated that although the carriers could do much in this direction on their own initiative, it was clear that they needed active support and direction from the federal government, involving a mixture of incentives and compulsory action.

An integrated transportation system is a necessity. Within such a system, buses play an active part in furnishing feeder service to the railroads. The basic problem, however, has been the Interstate Commerce Commission's interpretation of national policy with respect to transportation. This policy was confirmed by the report of the Secretary of Commerce, in which it was stated that there has been a "*** shift in emphasis and possible modification of the Transportation Act of 1940." Further confirmation was contained in a report of the United States Senate Committee on Interstate and Foreign Commerce. This report (October, 1952) held that the "*** poor financial condition of certain railroads is due in large part to unsound regulatory and promotional policies of the Federal Government."

In the New York metropolitan region, the Port Authority of New York has not acted on the legislated master plan under the Compact under which it was set up by the states of New Jersey and New York. This plan was abandoned in the early 1930's when the Port Authority's activities were shifted from finding a solution for the railroad-steamship port problems to the construction and operation of vehicular tunnels, bridges, and airports. These facilities, instead of promoting the plan, have had the opposite effect.

In a Senate report it is stated that any further decline in railroad traffic would lead to insolvency for most of the industry and that, if there is any practical solution to commuter service, it will have to be devised through the joint efforts of the railroads and the local governments. Alexander H. Elder states⁶

⁶ "New Jersey-New York Port Problem," by Alexander H. Elder, New Jersey Dept. of Conservation and Economic Development, December, 1952.

that the intent of the two states in setting up the Port of New York Authority was to realize the benefits of the "Comprehensive Physical Plan," the theory of which was the unification of railroad terminal operations. Since railroads are privately owned and operated, they are required to compete in the terminal area where it is most active, and where there is an inherent conflict between terminal competition and terminal unification. The railroads could hardly have been expected to initiate such a unification, if indeed, they could legally do so. It is the responsibility of the state commissions to solve this problem. Failure can result only in the eventual breakdown of the transportation system.

It has been frequently stated that civilization is measured in terms of transportation or man's ability to surmount the limitations of nature with respect to time, space, and natural laws for his economic well-being. It is therefore appropriate to note the interest in this important problem of mass transportation.

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